



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/922,181B

DATE: 07/29/2004

TIME: 13:56:51

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

1 <110> APPLICANT: Gu, Yizhong
 2 Shannon, Mark
 3 Nguyen, Cung-Tuong
 5 <120> TITLE OF INVENTION: FOUR HUMAN ZINC-FINGER-CONTAINING PROTEINS: MDZ3, MDZ4, MDZ7
 AND MDZ12
 7 <130> FILE REFERENCE: AEOMICA-12
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/922,181B
 C--> 9 <141> CURRENT FILING DATE: 2001-08-02
 9 <160> NUMBER OF SEQ ID NOS: 7046
 11 <170> SOFTWARE: Aeomica Sequence Listing Engine
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 1981
 15 <212> TYPE: DNA
 16 <213> ORGANISM: Homo sapiens
 18 <400> SEQUENCE: 1
 19 cggatagcac tggcgaccct agcgggttag aggccttca gggccgccc gggttgagcg 60
 20 caccatcaca tctaagccat cagcaagttt gttggttta atctccaaaa tacgtctga 120
 21 ttttgtctga ctcttgcca ccaccctgat ctaagccctt atcatctgct tgaatcacta 180
 22 acttgtctcc acttgcagg tttaaaagag ttgcttccat ttgactttt ctgtctgctg 240
 23 taccaacata tgagtttca gagggtcat tgatgcagtc attctcagtc tcctcgagg 300
 24 gagtcgaag atgcttaaag agcatccaga gatggcgaa gtcctcagc agcagttggg 360
 25 tattcctgtg gtgaaactgg agaaagagtt gccatggggc agaggaagg aggaccctag 420
 26 tccagagact ttccggctga ggttccggca gttccgtac caggaggcag ctggaccctt 480
 27 ggaagtcctt aaaaaaaaaa aggagctctg tgcgtggcgg ctgaggcccg agttgcacac 540
 28 caaggagcag atccctggagc tgctgggtct ggagcagttc ctcactatcc tgccccgcga 600
 29 gttctacgcc tggatccggg agcatggccc agagagtggc aaggccctgg ccgcctatgtt 660
 30 ggaggacctg acagaaaagag cactggaggc caaggcgggtt ccattccaca ggcaggagaga 720
 31 gcaggaggaa acagcactt gcagaggcgc ttgggagccca ggcattccagc tggggccagt 780
 32 ggaggttaag cctgaatggg ggtatcccccc tggggaaagga gttcaaggtc cagacccagg 840
 33 taccgaggag cagctcagtc aggaccctgg agatgagaca cggcccttcc aggagcaagc 900
 34 actacctgtt ctgcaggcgg gtcctggctt cccgcagtg aatcccagag accaagaaat 960
 35 ggcagctggg ttctttactg ctggatcgca ggggtgggg ccatttaaag atatggccct 1020
 36 ggcctccctt gaggaggagt ggaggcatgt gaccccgcc cagatagact gctttggga 1080
 37 gtatgtggaa cccgcaggact gcagggtctc tccaggcgtt gggagcaagg aaaaggaggc 1140
 38 aaaaccccca caggaagacc tgaaaaggcc gtcgtggca ctgacatcag agaggtttgg 1200
 39 ggaagctctt ctccaggccc ctgggctcgg aagggtctgt gagcaggagc ctggtggccc 1260
 40 tgcaggcagt ggcctggc ttcccttcc ccagcacggt gccatcccccc tgcctgacga 1320
 41 agtcaaaaacc cacagctct tctggaaagcc ttccagttgc cctgagttgtt ggaaaggatt 1380
 42 cagtccggagc tccaaatctcg tcaggccaca gcaaccac gaagagaagt cttatggctg 1440
 43 tgtggagtgt gggaaagggt ttaccctgag agagtacctg atgaagcacc agagaaccca 1500
 44 cctggaaag aggccttaag tgtgcagcga gtgctggaaa accttcagcc agagacacca 1560
 45 cctggagggtg caccagcga gccacactgg ggagaagccc cacaagtgcg gggactgctg 1620
 46 gaagagcttc agccgcaggc agcacctgca ggtgcaccgg aggacgcaca ccggggagaa 1680
 47 gccctacacc tgcgagttgtt gcaagagctt cagcaggaat gccaatctgg cggtgcaccgg 1740

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/922,181B

DATE: 07/29/2004

TIME: 13:56:51

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

48 gctgtccccac actggcgaga agccatatgg gtgccagggtg tgcggaaagc ggttcagcaa 1800
 49 aggggagcgg ctggtccgac accagagaat ccatacaggg gagaagccct accactgtcc 1860
 50 tgcctgcggg cgaagcttc accagaggc catcctcaac cggcaccaga agacccagca 1920
 51 cgcaggag cgcgtgtgc agtgagcata gcaggtggca ggcagcacca tcattcatct 1980
 52 t 1981
 54 <210> SEQ ID NO: 2
 55 <211> LENGTH: 1635
 56 <212> TYPE: DNA
 57 <213> ORGANISM: Homo sapiens
 59 <400> SEQUENCE: 2
 60 atgcttaaag agcatccaga gatggcgaa gtcctcagc agcagttggg tattcctgtg 60
 61 gtgaaactgg agaaagagt gccatggggc agaggaaggg aggaccctag tccagagact 120
 62 ttgcgtga ggttcggca gttccgtac caggaggcag ctggacccca ggaagcttt 180
 63 aggggctcc aggagctctg tcgtcggtgg ctgaggcccg agttgcacac caaggagcag 240
 64 atcctggagc tgctgggtgc ggagcagttc ctcactatcc tgcccccgcga gttctacgcc 300
 65 tggatccggg agcatggccc agagagtggc aaggccctgg cgcgcattgt ggaggaccc 360
 66 acagaaagag cactggaggc caaggcggtt ccatgccaca ggcaggggaga gcaggaggaa 420
 67 acagcacttt gcagaggcgc ttgggagcca ggcatccagc tggggccagt ggaggtaag 480
 68 cctgaatggg ggtatggccc tggggagga gttcaagggtc cagacccagg taccgaggag 540
 69 cagctcagtc aggaccctgg agatgagaca cgggccttcc aggagcaagc actaccttt 600
 70 ctgcaggcgg gtcctggcct cccgcagtg aatcccagag accaagagat ggcagctggg 660
 71 ttcttactg ctggatcgca ggggttgggg ccatattaag atatggccct ggccttcct 720
 72 gaggaggagt ggaggcatgt gaccccgcc cagatagact gctttggga gtatgtggaa 780
 73 cgcaggact gcagggtctc tccaggcggt gggagcaagg aaaaggagcc aaaacccca 840
 74 caggaagacc taaaaggggc gctggggca ctgacatcag agaggtttg ggaagcctct 900
 75 ctccaggggcc ctgggctcg aagggtctgt gaggcaggagc ctggggccc tgcaggcagt 960
 76 ggcctgggc ttcccttc ccaacgcgtt gccatcccc tgcctgacga agtcaaaacc 1020
 77 cacagctct tctggaaagcc tttccagtgc cctgagttgtt gggaaaggatt cagtcggagc 1080
 78 tccaatctcg tcaaggcacc cgcacccac gaagagaagt cttatggctg tggagggt 1140
 79 gggaaaggct ttaccctgag agagtacctg atgaagcacc agagaaccca cctggaaag 1200
 80 aggcctacg tgcgtcgca gtgctggaaa accttcagcc agagacacca cctggagggt 1260
 81 caccagcgc gccacactgg ggagaagccc cacaagtgcg gggactgtc gaagagcttc 1320
 82 agccgcaggc agcacctgc ggtgcaccgg aggacgcaca cggggagaa gecctacacc 1380
 83 tgcgagtgtg gcaagagctt cagcaggaat gccaatctgg cggtcaccg gctgccccac 1440
 84 actggcgaga agccatatgg gtgccagggtg tgcggaaagc ggttcagcaa aggggagcgg 1500
 85 ctggtccgac accagagaat ccatacaggg gagaagccct accactgtcc tgcctgcggg 1560
 86 cgaagcttc accagaggc catcctcaac cggcaccaga agacccagca cgcaggag 1620
 87 cgcgtgtgc agtga 1635
 89 <210> SEQ ID NO: 3
 90 <211> LENGTH: 544
 91 <212> TYPE: PRT
 92 <213> ORGANISM: Homo sapiens
 94 <400> SEQUENCE: 3
 95 Met Leu Lys Glu His Pro Glu Met Ala Glu Ala Pro Gln Gln Leu
 96 1 5 10 15
 98 Gly Ile Pro Val Val Lys Leu Glu Lys Glu Leu Pro Trp Gly Arg Gly
 99 20 25 30
 101 Arg Glu Asp Pro Ser Pro Glu Thr Phe Arg Leu Arg Phe Arg Gln Phe
 102 35 40 45

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/922,181B

DATE: 07/29/2004

TIME: 13:56:51

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

104 Arg Tyr Gln Glu Ala Ala Gly Pro Gln Glu Ala Leu Arg Gly Leu Gln
 105 50 55 60
 107 Glu Leu Cys Arg Arg Trp Leu Arg Pro Glu Leu His Thr Lys Glu Gln
 108 65 70 75 80
 110 Ile Leu Glu Leu Leu Val Leu Glu Gln Phe Leu Thr Ile Leu Pro Arg
 111 85 90 95
 113 Glu Phe Tyr Ala Trp Ile Arg Glu His Gly Pro Glu Ser Gly Lys Ala
 114 100 105 110
 116 Leu Ala Ala Met Val Glu Asp Leu Thr Glu Arg Ala Leu Glu Ala Lys
 117 115 120 125
 119 Ala Val Pro Cys His Arg Gln Gly Glu Gln Glu Glu Thr Ala Leu Cys
 120 130 135 140
 122 Arg Gly Ala Trp Glu Pro Gly Ile Gln Leu Gly Pro Val Glu Val Lys
 123 145 150 155 160
 125 Pro Glu Trp Gly Met Pro Pro Gly Glu Gly Val Gln Gly Pro Asp Pro
 126 165 170 175
 128 Gly Thr Glu Glu Gln Leu Ser Gln Asp Pro Gly Asp Glu Thr Arg Ala
 129 180 185 190
 131 Phe Gln Glu Gln Ala Leu Pro Val Leu Gln Ala Gly Pro Gly Leu Pro
 132 195 200 205
 134 Ala Val Asn Pro Arg Asp Gln Glu Met Ala Ala Gly Phe Phe Thr Ala
 135 210 215 220
 137 Gly Ser Gln Gly Leu Gly Pro Phe Lys Asp Met Ala Leu Ala Phe Pro
 138 225 230 235 240
 140 Glu Glu Glu Trp Arg His Val Thr Pro Ala Gln Ile Asp Cys Phe Gly
 141 245 250 255
 143 Glu Tyr Val Glu Pro Gln Asp Cys Arg Val Ser Pro Gly Gly Ser
 144 260 265 270
 146 Lys Glu Lys Glu Ala Lys Pro Pro Gln Glu Asp Leu Lys Gly Ala Leu
 147 275 280 285
 149 Val Ala Leu Thr Ser Glu Arg Phe Gly Glu Ala Ser Leu Gln Gly Pro
 150 290 295 300
 152 Gly Leu Gly Arg Val Cys Glu Gln Glu Pro Gly Gly Pro Ala Gly Ser
 153 305 310 315 320
 155 Ala Pro Gly Leu Pro Pro Gln His Gly Ala Ile Pro Leu Pro Asp
 156 325 330 335
 158 Glu Val Lys Thr His Ser Ser Phe Trp Lys Pro Phe Gln Cys Pro Glu
 159 340 345 350
 161 Cys Gly Lys Gly Phe Ser Arg Ser Ser Asn Leu Val Arg His Gln Arg
 162 355 360 365
 164 Thr His Glu Glu Lys Ser Tyr Gly Cys Val Glu Cys Gly Lys Gly Phe
 165 370 375 380
 167 Thr Leu Arg Glu Tyr Leu Met Lys His Gln Arg Thr His Leu Gly Lys
 168 385 390 395 400
 170 Arg Pro Tyr Val Cys Ser Glu Cys Trp Lys Thr Phe Ser Gln Arg His
 171 405 410 415
 173 His Leu Glu Val His Gln Arg Ser His Thr Gly Glu Lys Pro His Lys
 174 420 425 430
 176 Cys Gly Asp Cys Trp Lys Ser Phe Ser Arg Arg Gln His Leu Gln Val

RAW SEQUENCE LISTING

DATE: 07/29/2004

PATENT APPLICATION: US/09/922,181B

TIME: 13:56:51

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

177 435 440 445
 179 His Arg Arg Thr His Thr Gly Glu Lys Pro Tyr Thr Cys Glu Cys Gly
 180 450 455 460
 182 Lys Ser Phe Ser Arg Asn Ala Asn Leu Ala Val His Arg Arg Ala His
 183 465 470 475 480
 185 Thr Gly Glu Lys Pro Tyr Gly Cys Gln Val Cys Gly Lys Arg Phe Ser
 186 485 490 495
 188 Lys Gly Glu Arg Leu Val Arg His Gln Arg Ile His Thr Gly Glu Lys
 189 500 505 510
 191 Pro Tyr His Cys Pro Ala Cys Gly Arg Ser Phe Asn Gln Arg Ser Ile
 192 515 520 525
 194 Leu Asn Arg His Gln Lys Thr Gln His Arg Gln Glu Pro Leu Val Gln
 195 530 535 540
 200 <210> SEQ ID NO: 4
 201 <211> LENGTH: 1521
 202 <212> TYPE: DNA
 203 <213> ORGANISM: Homo sapiens
 205 <400> SEQUENCE: 4
 206 tttaaaaagag ttgactttt ctgtctgctg taccaacata tgagtttcag 60
 207 gaggggtcat ttagtgcagtc attctcagtc tcctcggagg gagtctgaag atgcattaaag 120
 208 agcatccaga gatggcgaa gctcctcagc agcagttggg tattcctgtg gtgaaactgg 180
 209 agaaaagagtt gccatggggc agaggaaggg aggacccctag tccagagact tttcggctga 240
 210 ggtttcggca gttccgctac caggaggcag ctggacccca ggaagcttt agggggctcc 300
 211 agtagctctg tcgtcggtgg ctgaggcccc agttgcacac caaggagcag atcctggagc 360
 212 tgctgggtct ggagcagttc ctcactatcc tgccccgcga gttctacgcc tggatccggg 420
 213 agcatggccc agagagtggc aaggccctgg ccgcattgtt ggaggacctg acagaaagag 480
 214 cactggagggc caaggcggtt ccatgccaca ggcaggggaga gcaggaggaa acagcacttt 540
 215 gcagaggcgc ttgggagcca ggcattccagc tggggccagt ggaggtaag cctaatggg 600
 216 ggatgccccc tggggaaagga gttcaaggc cagacccagg taccgaggag cagctcagtc 660
 217 aggacccctgg agatgagaca cgggccttcc aggagcaagc actacctgtt ctgcaggcgg 720
 218 gtcctggcct ccccgcatgt aatcccgag accaagagat ggcagctgg ttctttactg 780
 219 ctggatcgca ggggttgggg ccatttaaag atatggccct ggccttcctt gaggaggat 840
 220 ggaggcatgt gaccccgcc cagatagact gctttggga gtatgtggaa ccgcaggact 900
 221 gcagggtctc tccagcggtt gggagcaagg aaaaggaggc aaaaccccca caggaagacc 960
 222 tgaaaggggc gctggtggca ctgacatcg agaggtttgg ggaagccctt ctccaggggc 1020
 223 ctgggctcgg aagggtctgt gacgcaggagc ctggggccccc tgcaggcagt ggcctgggc 1080
 224 ttccctcctcc ccagcacgtt gccatcccccc tgcctgacga agtcaaaaacc cacagctcct 1140
 225 tctggaaagcc tttccagtgc cctgagtgtt ggaaaggatt cagtcggagc tccaatctcg 1200
 226 tcaggcacca ggcacccac gaagagaagt cttatggctg tggatgttggt gggagggtt 1260
 227 ttaccctgag agagtacctg atgaagcacc agagaaccca cctggggaaag aggccctacg 1320
 228 tggcagcga gtgtggaaa accttcagcc agagacacca cctggagggtt caccagcgc 1380
 229 ggcacactgg ggagaagccc cacaagtgcg gggactgctg gaagagcttc agccgcaggc 1440
 230 agcacctgcg ggtgcaccgg aggacgcaca ccggggagaa ggcctacacc tgcgagtgtt 1500
 231 gcaagagctt cagcaggaaat g 1521
 233 <210> SEQ ID NO: 5
 234 <211> LENGTH: 110
 235 <212> TYPE: DNA
 236 <213> ORGANISM: Homo sapiens
 238 <400> SEQUENCE: 5

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/922,181B

DATE: 07/29/2004

TIME: 13:56:51

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

239 tttaaaagag ttgcttccat ttgactttt ctgtctgctg taccacata tgagttcag 60
 240 gaggggtcat tgatgcagtc attctcagtc tcctcgagg gagtctgaag 110
 242 <210> SEQ ID NO: 6
 243 <211> LENGTH: 1411
 244 <212> TYPE: DNA
 245 <213> ORGANISM: Homo sapiens
 247 <400> SEQUENCE: 6
 248 atgcttaaag agcatccaga gatggcggaa gctcctcagc agcagttggg tattcctgtg 60
 249 gtgaaactgg agaaagagtt gccatggggc agaggaaggg aggaccctag tccagagact 120
 250 ttcggctga gggttcggca gttccgctac caggaggcag ctggacccca ggaagcttt 180
 251 agggggctcc aggagctctg tcgtcggtgg ctgaggcccg agttgcacac caaggaggcag 240
 252 atcctggagc tgctgggtct ggagcagttc ctcactatcc tgccccgcga gttctacgcc 300
 253 tgatccggg agcatggccc agagagtggc aaggccctgg cgcgcattggt ggaggacctg 360
 254 acagaaagag cactggaggc caaggcggtt ccatgccaca ggcaggggaga gcaggaggaa 420
 255 acagacttt gcagaggcgc ttgggagcc ggcattccage tggggccagt ggaggtaag 480
 256 cctgaatggg ggatgc(cc) tggggaaagga gttcaaggc(c) cagacccagg taccgaggag 540
 257 cagctcagtc aggacccctgg agatgagaca cgggccttcc aggagcaagc actacctgtt 600
 258 ctgcaggcgg gtcctggcct ccccgccagtg aatcccagag accaagagat ggcagctggg 660
 259 ttctttaactg ctggatcgca ggggttgggg ccatttaaag atatggccct ggccttcct 720
 260 gaggaggagt ggaggcatgt gaccccccagcc cagatagact gctttgggg gtagtggaa 780
 261 ccgcaggact gcagggtctc tccaggcggtt gggagcaagg aaaaggaggc aaaaccccca 840
 262 caggaagacc tgaaaggggc gctgggtggca ctgacatcag agaggttgg ggaaggctct 900
 263 ctccaggggcc ctgggtctgg aagggtctgt gaggcaggcctt gtcaggcagt 960
 264 ggcctgggc ttccctctcc ccagcacggc gccatcccc tgcctgacga agtcaaaacc 1020
 265 cacagctcct tctggaaagcc tttccagtgc cctgagtgtg ggaaaggatt cagtcggagc 1080
 266 tccaatctcg tcaggcacca gccaacccac gaagagaagt cttatggctg tggaggatgt 1140
 267 gggaaaggct ttaccctgag agagtacctg atgaagcacc agagaaccca cctggaaag 1200
 268 aggcctacg tgtgcagcga gtgctggaaa accttcagcc agagacacca cctggaggtg 1260
 269 caccagcgcga gccacactgg ggagaagccc cacaagtgcg gggactgctg gaagagctc 1320
 270 agccgcagggc agcacctgca ggtgcaccgg aggacgcaca ccggggagaa gccctacacc 1380
 271 tgcgagtgtg gcaagagctt cagcaggaat g 1411
 273 <210> SEQ ID NO: 7
 274 <211> LENGTH: 470
 275 <212> TYPE: PRT
 276 <213> ORGANISM: Homo sapiens
 278 <400> SEQUENCE: 7
 279 Met Leu Lys Glu His Pro Glu Met Ala Glu Ala Pro Gln Gln Gln Leu
 280 1 5 10 15
 282 Gly Ile Pro Val Val Lys Leu Glu Lys Glu Leu Pro Trp Gly Arg Gly
 283 20 25 30
 285 Arg Glu Asp Pro Ser Pro Glu Thr Phe Arg Leu Arg Phe Arg Gln Phe
 286 35 40 45
 288 Arg Tyr Gln Glu Ala Ala Gly Pro Gln Glu Ala Leu Arg Gly Leu Gln
 289 50 55 60
 291 Glu Leu Cys Arg Arg Trp Leu Arg Pro Glu Leu His Thr Lys Glu Gln
 292 65 70 75 80
 294 Ile Leu Glu Leu Leu Val Leu Glu Gln Phe Leu Thr Ile Leu Pro Arg
 295 85 90 95
 297 Glu Phe Tyr Ala Trp Ile Arg Glu His Gly Pro Glu Ser Gly Lys Ala

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/922,181B

DATE: 07/29/2004

TIME: 13:56:52

Input Set : D:\sequence.txt

Output Set: N:\CRF4\07292004\I922181B.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date